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A Potential Inflation Solution for Equity Investors

We are seeing that a current top concern of investors of all types globally is how their portfolios will perform in a sustained inflationary environment. We believe that direct exposure to commodities might be beneficial, but many institutional investors do not have dedicated commodity futures allocations. Rather, most investors' largest allocation is to equities, and we think there may be some interesting equity solutions that may help position for inflation without requiring a change to strategic asset allocation.

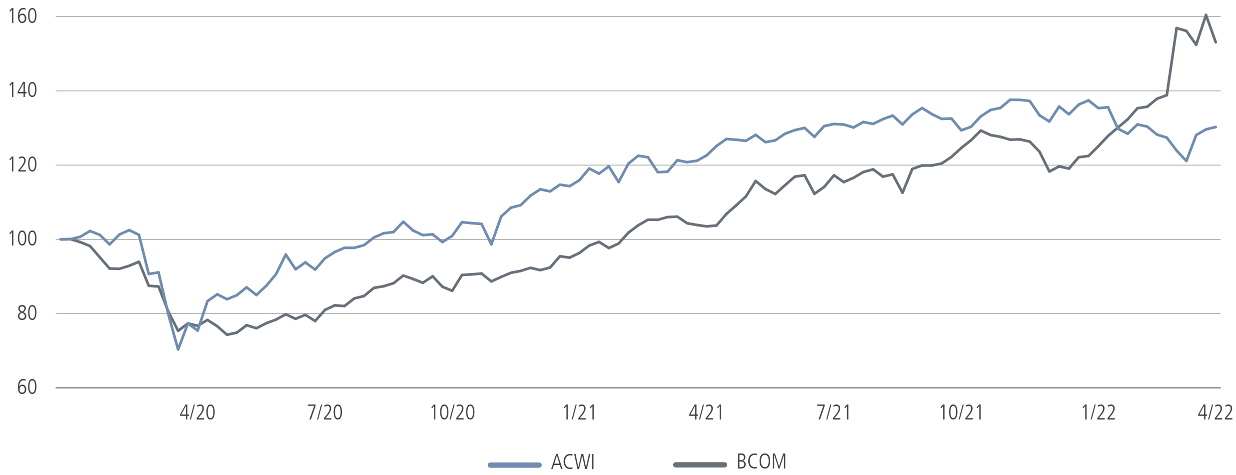
Equity real asset strategies may help investors benefit from higher inflation regimes by increasing exposure to hard assets such as energy, mining and agricultural equities, precious metals and real estate. For equity investors who are unable to allocate to futures due to their investment policies, we believe this approach may provide a way to participate in the opportunities created by rising real asset prices.

Because commodity prices have risen so much in the past two years (the Bloomberg Commodity Index [BCOM] is up 102% since April 2020[1]), some investors who are just now considering investing directly in commodities funds are hesitating for fear that most of the price move is past. Interestingly, the MSCI ACWI Index was up 66% over the same period, but commodities' and equities' paths diverged starting at the beginning of 2022 (see Figure 1).

[1] As of March 31, 2022, cumulative return between March 31, 2020 and March 31, 2022.

FIGURE 1. COMMODITIES AND EQUITIES HAVE DIVERGED THIS YEAR

Cumulative returns of the BCOM and MSCI ACWI Indices, January 3, 2020 – March 31, 2022



Source: Bloomberg.

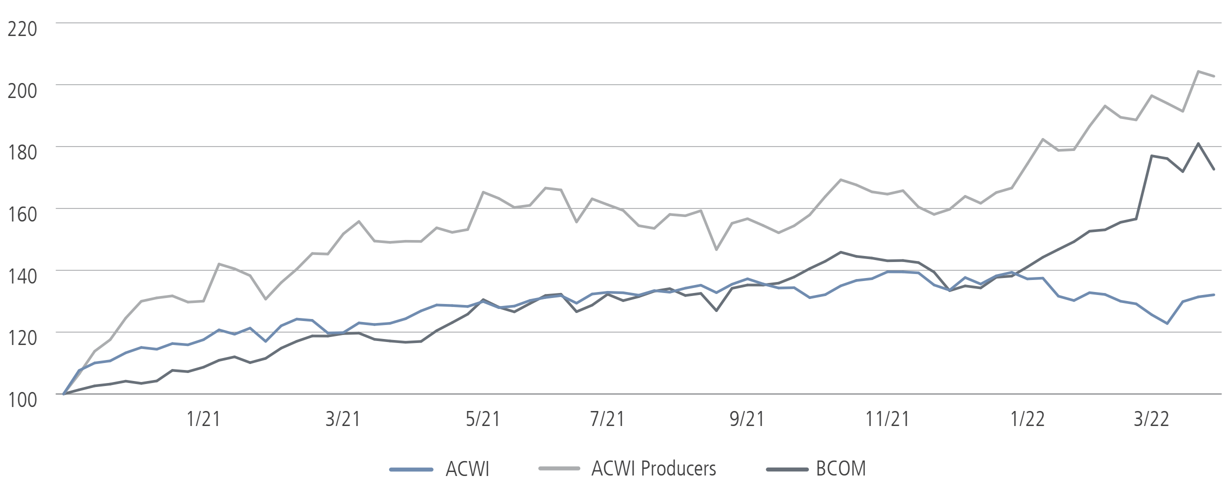
As concerns over rising rates have impacted growth equity market performance and led to a downturn in broad equity markets, commodities have continued to rally. How did real asset equities perform?

To study how commodity-related equities performed during this divergence, we looked to the MSCI ACWI Commodity Producers Index (ACWI CPI).

Adding the ACWI CPI as a proxy for commodity-related equities and zooming in on more recent history, Figure 2 shows that for the first quarter of 2022, the BCOM Index (commodities) was up 25.5% and the MSCI ACWI was down 5.4%, while the MSCI ACWI CPI was up 20.5%, demonstrating that it is possible to capture commodity returns in an equity portfolio. We measured the correlations between the ACWI CPI and BCOM[2] and find that they are 0.72, showing that the equity index is a good proxy for direct commodity investments compared to the MSCI ACWI alone, which has a 0.47 correlation with BCOM over the same period.

FIGURE 2: COMMODITY RETURNS CAN BE CAPTURED IN EQUITY PORTFOLIOS

Cumulative performance, November 6, 2020 – March 31, 2022



Source: Bloomberg.

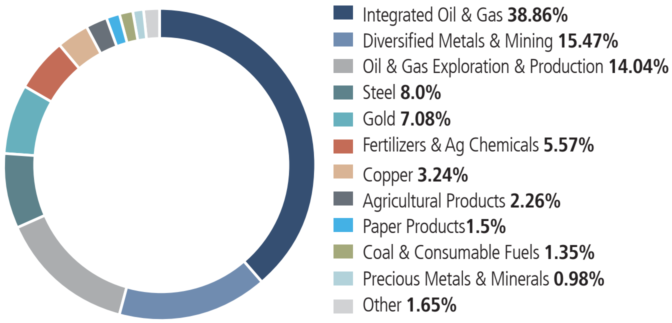
[2] Based on monthly returns from October 2013 and March 2022 inclusive.

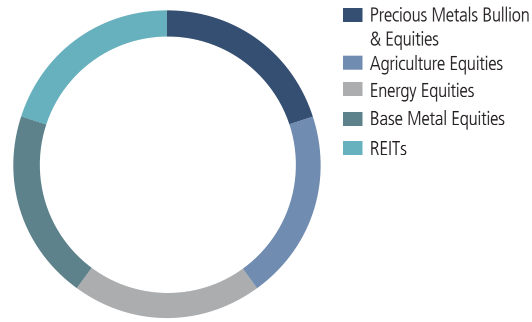
More recently, however, the start of the war in Ukraine and resulting sanctioning of Russian entities were major geopolitical shocks, which raised volatility and risk premia across affected commodity markets. After surging initially, prices of key commodities, such as oil and wheat, subsequently declined by over 15% and 20% from their peaks to the end of March, respectively, highlighting some of the idiosyncratic risks embedded in the commodity space. Although commodity producers may be able to reduce their downside exposure to such moves through partial downside hedging, we believe that recent events in Ukraine have provided a useful reminder of the importance of thoughtful diversification among sectors as well.

Thus, we believe that while the ACWI CPI is a useful measurement tool to determine how commodity-related equities perform, as can be seen in Figure 3, it is dominated by energy (over 50%). It is also devoid of real estate, which through its large weight in the Consumer Price Index and as a major business cost line item, can be another important inflation driver.

FIGURE 3: MSCI ACWI COMMODITY PRODUCERS INDEX (LEFT) VS. DIVERSIFIED APPROACH (RIGHT)

Sub-industry Weights





Source: MSCI, Neuberger Berman. As of March 31, 2022.

To provide more diversified exposure to the inflation theme, we believe that equity investors may consider a diversified approach across energy, base metals and agricultural equities, precious metals and REIT equities. Using the available history of the relevant MSCI sector subindices, we calculated that an equally weighted approach would have outperformed the MSCI ACWI Commodity Producers Net TR Index by over 150 basis points from Nov 30, 2003 and would be up 16.0% year-to-date through March 31, 2022.[3]

To check its relationship to the commodity index, we calculated correlations[4] between the constructed returns and the BCOM index and found that compared to BCOM/ACWI CPI at 0.76 and BCOM/ACWI at 0.56, it provided good participation at 0.72.

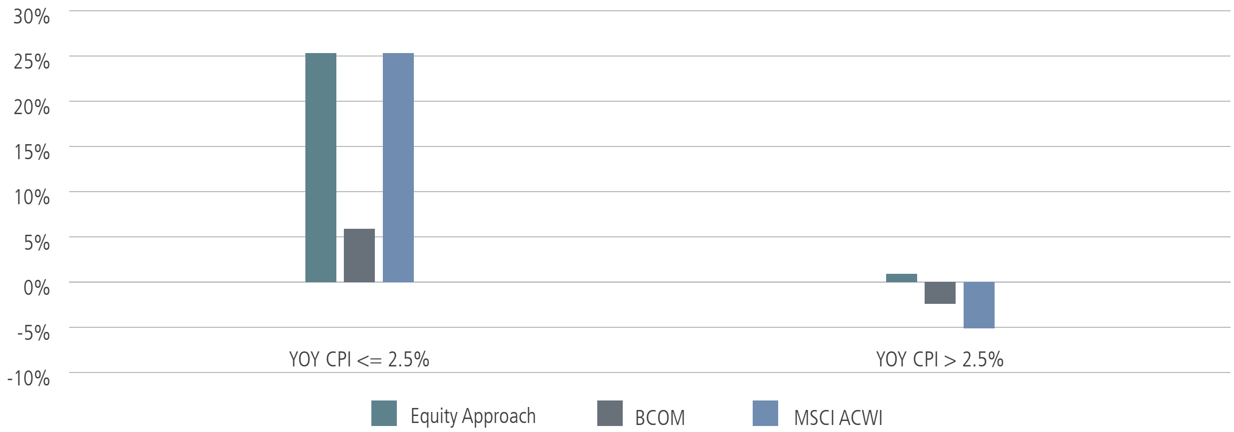
Finally, by separating returns since inception into periods where the Consumer Price Index was greater or less than 2.5%, we see in Figure 4a that the diversified commodity equity approach outperformed the BCOM in both regimes, surpassed the ACWI by 6.0% in high inflation regimes, and was almost in line with ACWI by in low inflation regimes. On Figure 4b, we show that these patterns still hold if we exclude the influential Q4 2008 which, under this threshold, would be a period of high year-over-year inflation.

[3] Bloomberg, Neuberger Berman. The model portfolio is equally weighted by notional exposure across the five asset classes, rebalanced monthly. Indices used are the MSCI ACWI Select Gold Miners IMI Net Return Index (M1WDS1MI Index); MSCI ACWI Agriculture & Food Chain Net Total Return Index (M1WD0AGF Index); MSCI ACWI Energy Net Total Return Index (M1WD0EN Index); MSCI World Metals and Mining Net Total Return Index (NDUWMMIN Index), and the S&P United States REIT Index (SPREIUSRT Index).

[4] Based on monthly returns from October 2013 and March 2022 inclusive.

FIGURE 4A: LEADERSHIP IN HIGH INFLATION

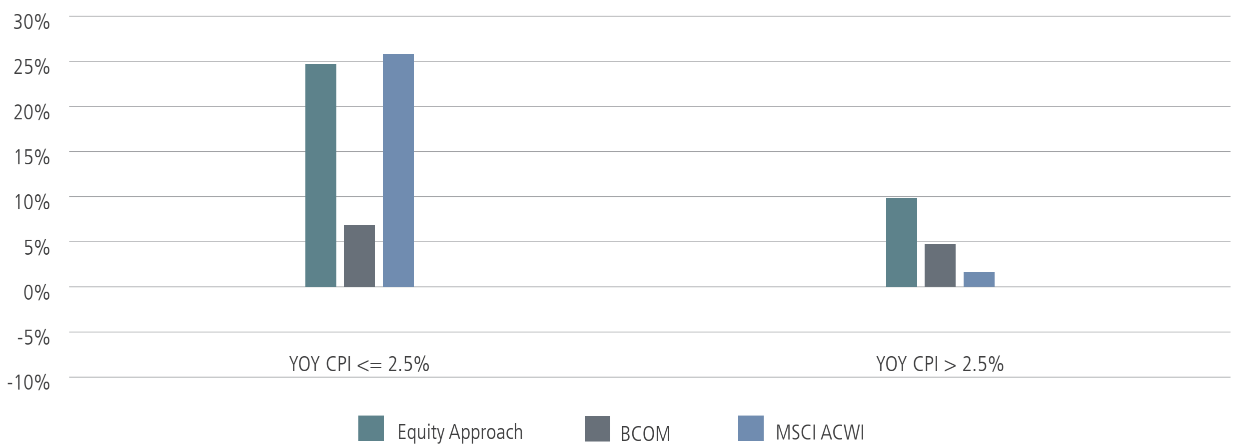
Gross performance vs. ACWI and BCOM during high and low inflation regimes, November 30, 2003 – March 31, 2022



Source: Bloomberg and Neuberger Berman.

FIGURE 4B: LEADERSHIP IN HIGH INFLATION

Gross performance vs. ACWI and BCOM during high and low inflation regimes, November 30, 2003 – March 31, 2022 (excluding Q4 2008)



Source: Bloomberg and Neuberger Berman.

With recent price pressures from the war in Ukraine not yet fully reflected in released data, FOMC members have raised their inflation projections for 2022 – 2024. For investors who also expect inflation to persist in the near future and medium term, we believe an investment in real asset equities can provide those unable to allocate to commodities directly with an alternative way to participate in the inflation trade.

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The **MSCI ACWI Commodity Producers Index** captures the global opportunity set of commodity producers in the energy, metal and agricultural sectors. Constituents are selected from the equity universe of MSCI ACWI, the parent index, which covers mid and large cap securities across 23 Developed Markets (DM) and 27 Emerging Markets (EM) countries.* All index constituents are categorized in one of 12 sub-industries according to the Global Industry Classification Standard (GICS®), including: integrated oil & gas, oil & gas exploration & production, gold, steel, aluminum, precious metals & minerals, agricultural products, paper products and forest products. The MSCI Commodity Producers Indices are free float-adjusted market capitalization indices designed to track the performance of global listed commodity producers. By capturing broad and diversified investment opportunities across the energy, metals and agricultural sectors, they aim to serve as a relevant benchmark and research tool for investment in the universe of listed commodity producers.

The **Bloomberg Commodity Total Return Index** is composed of futures contracts and reflects the returns on a fully collateralized investment in the BCOM. This combines the returns of the BCOM with the returns on cash collateral invested in 13 week (3 Month) U.S. Treasury Bills. The Bloomberg Commodity Index (BCOM) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from the sixth to tenth business day based on the roll schedule.

The **S&P United States REIT Index** defines and measures the investable universe of publicly traded real estate investment trusts domiciled in the United States.

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